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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,202	11/13/2001	Bruno Scheumacher	P 284108 RP-00296-US2	6169

909 7590 03/26/2003

PILLSBURY WINTHROP, LLP
P.O. BOX 10500
MCLEAN, VA 22102

EXAMINER
LUBY, MATTHEW D

ART UNIT	PAPER NUMBER
3611	

DATE MAILED: 03/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/987,202	Applicant(s) SCHEUMACHER ET AL.	
	Examiner Matt Luby	Art Unit 3611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 February 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2, 5, 6, 15-17, 19-21 and 23-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lakosky (5,598,065) in view of Applicant's Admitted Prior Art (AAPA).

Lakosky discloses all of Applicants' claimed invention (figure 1; col. 4, lines 21-23) but does not specifically disclose that a turbocharger or a CVT (continuously variable transmission) is used. AAPA discloses that it is well known to use a turbocharger in conjunction with a four-stroke engine and a CVT in order to increase power output and fuel efficiency of the engine and to reduce or prevent turbo lag (page 2, lines 5-7 and page 21, lines 16-18). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a turbocharger on the four-stroke engine of Lakosky as taught by AAPA in order to increase power output and fuel efficiency of the engine.

Regarding claims 2 and 15-17, all of the limitations recited are inherent properties of an engine and a turbocharger, e.g., that an engine has cylinders housed in combustion chambers which receive air through an inlet/throttle body and expel unused

air/fuel mixture through an outlet and that turbochargers have an inlet inputting air from the atmosphere through a duct and an inlet inputting exhaust gas from the engine to pressurize/compress the total volume of air therein, thereby turbocharging the air that is to be eventually input into the engine, and expelling non-used air through an exhaust system to a muffler.

Regarding claims 5, 6, 20, 21 and 26-30, the modified Lakosky snowmobile does not specifically disclose whether the air passage is positioned fore or aft of the engine, where the CVT is positioned relative to the turbocharger and what side of the engine the turbocharger, plenum and CVT are disposed on. It would have been obvious to one having ordinary skill in the art at the time the invention was made to put the air passage either fore or aft of the engine, to put the CVT on an opposite or adjacent side to the turbocharger or plenum, to put the turbocharger on a starboard or port side of the engine and to put the plenum and turbocharger on opposite sides of the engine, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

3. Claims 3, 4, 7-14, 18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lakosky in view of AAPA as applied to claim 1 above, and further in view of Cooper et al. (4,698,761).

The modified Lakosky device discloses all of Applicant's claimed invention except for a heat exchanger/intercooler connected to the turbocharger (by a duct) and a plenum connected to the heat exchanger/intercooler (by a duct), wherein the intercooler has an intake portion and an outlet portion connected by conduits. Cooper et al.

disclose that a heat exchanger/intercooler connected to a turbocharger (by a duct - this is inherent) and a plenum connected to the heat exchanger/intercooler (by a duct - this is inherent) is well known for use with an engine to supply clean, compressed air to the cylinders of the engine (col. 7, line 53 to col. 8, line 11). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide a heat exchanger/intercooler connected to the turbocharger and a plenum connected to the heat exchanger/intercooler on the modified Lakosky snowmobile as taught by Cooper et al. in order to supply clean, compressed air to the cylinders of the engine.

Regarding claim 7, it is noted that it is inherent that intercooler have an inlet and outlet connected by conduits.

Regarding claims 8-10, Cooper et al. does not specifically disclose the positional arrangement of the intercooler. It would have been obvious to one having ordinary skill in the art at the time the invention was made to arrange the intercooler normally, parallel or at an angle to the oncoming air flow, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claim 14, the modified Lakosky snowmobile does not specifically disclose the internal volume of the plenum. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the internal volume of the plenum between 3 and 5 liters, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Regarding claims 18 and 22, the modified Lakosky snowmobile does not specifically disclose the speed range for which the turbocharger pressurizes the air. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the speed range below 3000 rpm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Response to Arguments

4. Applicants' arguments filed 2/7/03 have been fully considered but they are not persuasive.

Applicants' argues in the paragraph bridging pages 5-6 that "The Office Action is using Applicants' own invention as a basis for the rejection, which is clearly improper." This is not at all what the last Office Action did. In the quoted portions of paragraphs [0005] and [0006] on page 5 of the response, applicants have emphasized part of the sentences that read "It is known outside the art of snowmobiles to use a turbocharger in conjunctions with a four-stroke engine..." and "[h]owever, the use of a continuously-variable-transmission (CVT) in the snowmobile, as is well known in the art, can help reduce or prevent turbo lag." What the last Office Action did was to combine these admissions (i.e., that it is well known to use a turbo-charger on a four-stroke engine and a CVT on a snowmobile) with the Lakosky reference already taught a four-stroke engine for a snowmobile. This is all that was required by claim 1 which reads "said engine being a turbo-charged four-stroke type engine" and claim 19, which reads "further

comprising a continuously-variable-transmission". Applicants' mere combination of an admittedly well-known turbocharger and CVT on a 4-stroke engine snowmobile is clearly met by the Lakosky in view of AAPA combination.

In response to applicant's argument (page 6) that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicants' argument (page 6) that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the motivation comes from Applicants' own admissions in the specification, namely that a turbocharger provides "increased power output and fuel efficiency" and that a CVT "can help reduce or prevent turbo lag" from a turbocharged engine.

In response to applicant's argument (page 7) that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the suggestion comes from the Cooper et al. reference itself as discussed in the rejection above. No duplicate recitation of that suggestion/motivation is needed here.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matt Luby whose telephone number is (703) 305-0441. The examiner can normally be reached on Monday-Friday, 9:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lesley Morris can be reached on (703) 308-0629. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Matt Luby
Examiner
Art Unit 3611

M.L.
March 23, 2003

DANIEL G. DePUMPO
PRIMARY EXAMINER